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| 10/046,244      | 01/16/2002  | Ronald D. Blum       | 10551/228           | 4735             |

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| EXAMINER |
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STULTZ, JESSICA T

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| ART UNIT | PAPER NUMBER |
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2873

DATE MAILED: 12/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/046,244

Applicant(s)

BLUM ET AL.

Examiner

Jessica T Stultz

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 14-44 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 45-47 and 49-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Drawings***

The drawings are objected to because the "Brief Description of the Drawings" section does not include a description of Figures 37f and 37g.

### ***Election/Restrictions***

Applicant's election with traverse of Group 1A, claims 1-13, 45-47, and 49-50 in Paper No. 8 is acknowledged. The traversal is on the ground(s) that searching the non-elected claims would require little or no additional searching by the examiner. This is not found persuasive because searching the non-elected claims would require additional searching and would place an undue burden on the examiner since these claims include more limitations, which would need to be additionally searched and are drawn to either different species of optical lens with or a specific method of making an optical lens as discussed in Paper No. 6.

The requirement is still deemed proper and is therefore made FINAL.

### ***Double Patenting***

Claims 1-13, 45-47, and 49-50 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 58-71 of U.S. Patent No. 6,491,394, herein referred to as Blum et al '394. Although the conflicting claims are not identical, they are not patentably distinct from each other because Blum et al '394 discloses an

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electro-active lens and method of making an electro-active lens wherein the lens has a first electro-active region (electro-active zone) and a perimeter region which is removable to configure the lens for a specific eyeglass frame (claims 58 and 71) wherein the lens is made from a lens blank (claims 59-60), but does not specifically disclose that the first region is an refractive matrix. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the lens first region of the lens of Blum et al '394 to further include be a refractive matrix since Blum et al '394 discloses the electro-active region having a plurality layers of pixilated regions (claim 67), which can be considered a refractive matrix.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 10-13, 45-47, and 49-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Blum et al US 6, 491,394.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

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Regarding claims 1, 45 and 49, Blum et al '394 discloses an optical lens system comprising a first optical lens and a method of making the lens, having a first region and a perimeter region on a lens blank (Column 39, line 27-column 40, line 32, wherein the first region is the electro-active zone and the perimeter region of the blank is disclosed); an electro-active refractive matrix coupled to the first region of the optical lens (Column 24, lines 1-25, and claims 58-70, wherein the electro-active zone "2010" of lens "2000" has a "plurality of pixilated regions" and can be considered an electro-refractive matrix, Figure 20), the perimeter region of the lens being removable, by edging, to configure the optical lens for a specific eyeglass frame (Column 39, line 27-column 40, line 32, as disclosed in claim 58 and 71).

Regarding claims 2 and 3, it is inherent from Blum et al '394 that more than 60% of the perimeter region of the lens may be remove from the optical lens to configure the optical lens for a specific eyeglass frame, this being reasonably based upon at least a portion of the outer perimeter being removed to reconfigure the shape of the lens to conform to an eyeglass frame and since there a wide range of frame sizes and shapes, it is assumed that large portions of the perimeter region can be removed to fit various frames.

Regarding claims 4 and 50, Blum et al '394 further discloses that the electro-active matrix includes patterned electrodes (Column 24, lines 1-25, wherein the material "2010" has electrodes "2030", Figure 20).

Regarding claim 5, Blum et al '394 further discloses that the electro-active matrix includes a diffractive element (Column 12, lines 1-12, wherein the lens blank "2800" can have diffractive characteristics, Figure 28).

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Regarding claims 6 and 47, Blum et al '394 further discloses that the electro-active matrix includes a plurality of pixilated elements (Column 24, lines 1-25, wherein the material "2010" has is made of pixels, Figure 20).

Regarding claims 7, 8, 10, and 46, Blum et al '394 further discloses that the lens comprises a controller, including a power source (Column 24, lines 17-24, which discloses a controller and power source, Figure 20), and a conductor bus along the radius of the first optical lens coupling the perimeter region (Column 24, lines 58-62, Figure 20) coupled to the lens.

Regarding claim 11, Blum et al '394 further discloses that the lens include a range finder and power source coupled to the lens (Column 29, line 65-Column 30, line 14, wherein the range finder "2170" and power source "2150" is coupled to lens "2120", Figure 21).

Regarding claims 12 and 13, Blum et al '394 further discloses that a controller (Column 24, lines 17-24, which discloses a controller, Figure 20), range finder (Column 29, line 65-Column 30, line 14, wherein the range finder "2170" and power source "2150" is coupled to lens "2120", Figure 21), and a power source (Column 24, lines 17-24, which discloses a power source, Figure 20) are a coupled to a carrier (Column 30, lines 2-14, wherein the carrier is frame "2110", Figure 21) coupled to the matrix and wherein the electro-active matrix includes a diffractive element (Column 12, lines 1-12, wherein the lens blank "2800" can have diffractive characteristics, Figure 28).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-8, and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piosenka et al in view of Weltmann.

Regarding claim 1 Piosenka et al discloses an optical lens system (Abstract) including a first optical lens having a first region and a perimeter region (Column 4, lines 34-Column 5, line 9, wherein the first region is the electro-active pixel regions "51" and the rim on the surface is the perimeter region, Figures 9-10); an electro-active refractive matrix coupled to the first region of the optical lens (Column 4, lines 34-Column 5, line 9, wherein the lens "50" has pixel regions "51", Figures 9-10), but does not specifically disclose that the perimeter region of the lens is removable to configure the optical lens for a specific eyeglass frame. However, Weltmann teaches that an optical lens for eyeglasses can be configured wherein the perimeter region is removable (Abstract, Figures 1-3) so that the lens can be tried on with different eyeglass frames (Abstract, Figures 1-3, Column 1, line 7 and Column 3, lines 16-47). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the electro-active lens of Piosenka et al to further include a removable perimeter region of the lens to configure the optical lens for a specific eyeglass frame since Weltmann teaches that an optical lens for eyeglasses can be configured wherein the perimeter region is removable so that the lens can be tried on with different eyeglass frames.

Regarding claims 4-8, Piosenka et al further discloses an optical lens system as disclosed above and taught by Weltmann wherein the electro-active refractive matrix includes patterned electrodes (Column 3, line 47-51, wherein the electrodes are "28", Figure 4), a diffractive element (Column 4, lines 34-63, wherein the pixel elements can be diffractive), a plurality of

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pixilated elements (Column 4, lines 48-50, wherein the pixels are "51", Figures 9-10), a controller (Column 3, lines 43-45, wherein the controller is "70", Figure 12), including a power source (Column 5, lines 10-22, wherein the frames have a power source), and a conductor bus (Column 4, line 65, wherein the conductors are "52 and 53", Figures 9-10).

Regarding claims 10-13, Piosenka et al further discloses an optical lens system as disclosed above and taught by Weltmann wherein a conductor bus is positioned along the radius of the first optical lens coupling the perimeter region to the electro-active region (Column 4, line 34-Column 5, line 9, wherein the conductors are 52 and 53, Figure 10), a range finder (Column 5, line 57-Column 6, line 25), controller (Column 3, lines 43-45, wherein the controller is "70", Figure 12), and power source coupled to a carrier (Column 5, lines 10-22, wherein the frames have a power source), wherein the electro-active matrix includes a diffractive element (Column 4, lines 34-63, wherein the pixel elements can be diffractive).

Claims 45-47 and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piosenka et al in view of Gottschald.

Regarding claims 45 and 49, Piosenka et al discloses a method of making an optical lens (Abstract) having an electro-active refractive matrix and an outer surface (Column 4, lines 34-Column 5, line 9, wherein the lens has electro-active pixel regions "51" and the rim on the surface is the outer region, Figures 9-10), but does not disclose edging an outer layer of the lens system to configure the lens to fit within a specified eyeglass frame. Gottschald teaches that an ophthalmic lens can be made by edging the outer perimeter of the lens, by lathing, in order to process the edge of the lens (Abstract and Column 1, line 6 and Column 2, lines 40-57). Furthermore, lathing the edge of the lens will inherently "modify the shape of the lens system".



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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the outer periphery of the lens of Piosenka to be edged to configure the lens to fit within a specified eyeglass frame since Gottschald teaches that an ophthalmic lens can be made by having the outer perimeter of the lens edged by lathing in order to process the edge of the lens, which would inherently modify the shape of the lens system.

Regarding claims 46-47 and 50, Piosenka et al further discloses a method of making a lens system as disclosed above and taught by Gottschald wherein a conductor of the lens system is connected to the eyewear frame conductor (Column 4, line 65, wherein the conductors are "52 and 53", Figures 9-10) and the electro-active matrix includes a plurality of individual pixel (Column 4, lines 48-50, wherein the pixels are "51", Figures 9-10) and patterned electrodes (Column 3, line 47-51, wherein the electrodes are "28", Figure 4).

***Allowable Subject Matter***

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Specifically in reference to claim 9, none of the prior art either alone or in combination disclose or teach of an optical lens as disclosed above, specifically including a second optical lens coupled to the first optical lens, the second optical lens covering at least a portion of the electro-active refractive matrix.

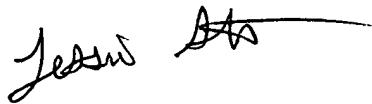
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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica T Stultz whose telephone number is (703) 305-6106. The examiner can normally be reached on M-Th 7:30-5, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 703-308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Jessica Stultz  
December 8, 2003



**JORDAN SCHWARTZ**  
**PRIMARY EXAMINER**